Kingshook Bhattacharyya

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Education:

- Standard X (Madhyamik) under West Bengal Board of Secondary Education from Hijli High School, IIT Kharagpur with 78 % (701/900).
- Standard XII under Central Board of Secondary Education from Kendriya Vidyalaya, IIT Kharagpur with 86 % (343/400).
- Bachelor of Technology from the Indian Institute of Technology, Kharagpur (1988-1992) in Mechanical engineering with CGPA 8.14/10.0
- Master of Technology from the Indian Institute of Technology, Kharagpur (1993-1995) in Machine Dynamics with CGPA 8.21/10.0
- Ph. D. from the Indian Institute of Technology, Kharagpur (1995-2000) in Mechanical engineering

Professional Experience:

- Present Associate Professor, Dept of Mechanical Engineering, IIT Kharagpur
- Teaching assignments Mechanics (currently coordinator for mechanics), Dynamics, Kinematics of machines, Engineering software laboratory, Mechanics of Solids, Nonlinear Vibrations, Automatic Controls.
- Other departmental responsibilities Advisor to mechanical engineering society, ERP representative..
- Non departmental responsibilities Treasurer (Technology Students Gymkhana),
- 2004 to 2008 Assistant Professor, Dept of Mechanical Engineering, IIT Kharagpur
- Teaching assignments Mechanics, Dynamics, Kinematics of machines, Nonlinear Vibration, Engineering Drawing, Engineering software laboratory.
- Other departmental responsibilities Advisor to mechanical engineering society, faculty in charge of placements, faculty advisor to 05ME and MF undergraduate students
- Non departmental responsibilities Sports(athletics) advisor to Technology Students Gymkhana
- **2001 to 2004 Mechanical Engineer at GEITC**, John F Welch Technology Center (Whitefield, Bangalore). Projects handled involve nonlinear dynamic stress analysis of biomedical instruments using ABAQUS, transient dynamics of washing machines using DADS, elastohydrodynamic analysis of ball bearings under extreme conditions with non-standard lubricants, wind turbine modeling in ADAMS and MATLAB.
- **2000 to 2001 Project Engineer at Altair Engineering**, USA working onsite at General Motors Technical Center (Warren), Information Support and Systems group. Responsibilities involved MotionView support for General Motors worldwide, development of templates in MotionView for analysis of automotive systems including chassis, power train, steering system, suspensions, *High Speed Road Shake* test and *Hydraulic Boost for Integral Gear Steering Systems*, development of Standard Tire Interface for convenient use of GMTIRE, SWIFT, FIALA, MDI tires with ADAMS, MotionView and DAADS.
- □ 1999-2000 Research Analyst at Quality Engineering and Software Technologies (QUEST), USA working as consultant to TRW (1999 to Nov 2000). Worked with TRW Occupant Restraint Systems group in the Seat Belts division. Projects undertaken included modeling and analysis of seatbelt sensors for General Motors, Ford, BMW, Volkswagen, modeling and analysis of rack and pinion pretensioners.
- 1992-1993, Senior Officer at TATA Iron and Steel Company (TISCO), Jamshedpur

Research Gudiance:

- □ Ph. D. Guidance 2
- Unknown Input State Estimators for Component Fault Detection and Isolation of Lumped Parameter Systems Sharifuddin Mondal (co supervised with Prof. Goutam Chakraborty)
- Study on Different Strategies for Soft Computing-based Drill Wear Monitoring using Multiple Sensors Karali Patra (co supervised with Prof. S. K. Pal)
- Magnetomicropolar hydrodynamic lubrication in bearings ongoing

Projects and Consultancy:

- □ Shaft bearing system analysis: Client -GE JFWTC; value: 1.38 Lakhs; Period 6 months; PI, status completed/
- □ Standardization of process parameters in withering, maceration, rolling, fermentation and drying of tea: Client GOI, Tea Board of India; Co PI for rolling analysis part along with Prof. B. Maiti; Value 30 lakhs; Period 4 years; Status completed
- □ Development of a vehicle for SAE Formula car international competition for students: Sponsor SRIC; PI along with Professors C.S Kumar and A. K Mohanty; Status till 2016
- □ Virtual Lab on Kinematics (completed) PI
- □ Virtual Lab (maintenance phase) Co PI, ongoing
- □ Pedagogy Strength of materials